

In the Claims:

1. (Currently amended) An electrode material for electrical discharge machining made of a W-Cu alloy containing at least 40% by weight of W, at most 15% by weight of one of an additional element and a compound thereof, and a balance of [[Eu,]] Cu and from 0 to 10% by weight of Ni, containing, as one of said additional element and said compound thereof, at most 10% by weight of at least one selected from an alkali metal element, an alkaline-earth metal element and a rare-earth element, and an oxide, a hydroxide, a nitride, a boride and a sulfide of said elements in particles having a mean particle diameter of less than 3 μ m.
2. (Currently amended) The electrode material for electrical discharge machining according to claim 1, wherein ~~said at least one selected from said alkali metal element, said alkaline-earth metal element and said rare-earth element, and said oxide, said hydroxide, said nitride, said boride and said sulfide of said elements in particles has a mean particle diameter of said particle is~~ less than 1 μ m.
3. (Currently amended) The electrode material for electrical discharge machining according to claim 1, wherein ~~said at least one selected from said alkali metal element, said alkaline-earth metal element and said rare-earth element,~~

5 and said oxide, said hydroxide, said nitride, said boride
6 and said sulfide of said elements in particles [[has]] have
7 a mean interparticle spacing of at most 10 μ m.

1 4. (Currently amended) The electrode material for electrical
2 discharge machining according to claim 1, wherein said at
3 least one selected from said alkali metal element, said
4 alkaline-earth metal element and said rare-earth element,
5 and said oxide, said hydroxide, said nitride, said boride
6 and said sulfide of said elements in said particles
7 ~~exists in~~ is mixed into particles of the Cu.

1 5. (Currently amended) The electrode material for electrical
2 discharge machining according to claim 1, wherein said at
3 least one selected from said alkali metal element, said
4 alkaline-earth metal element and said rare-earth element,
5 and said oxide, said hydroxide, said nitride, said boride
6 and said sulfide of said elements in said particles ~~exists~~
7 ~~in some of W particles.~~ is mixed into some particles of
8 the W.

1 6. (Original) The electrode material for electrical discharge
2 machining according to claim 1, wherein said alkali metal
3 element, said alkaline-earth metal element and said
4 rare-earth element, and said oxide, said hydroxide, said
5 nitride, said boride and said sulfide of said elements are

6 at least one of Ba, Nd, Ce, Y, Ca and K, and an oxide and
7 a hydroxide thereof.

1 7. (Currently amended) The electrode material for electrical
2 discharge machining according to claim 1, wherein said W
3 ~~contains~~ is contained in W particles that include at least
4 30% by weight of particles having a particle diameter of at
5 most 1 μ m with respect to all of the W particles.

1 8. (Currently amended) The electrode material for electrical
2 discharge machining according to claim 1, ~~wherein at most~~
3 ~~10% by weight of Ni is further contained instead of a~~
4 ~~portion of said Cu. containing a positive amount of~~
5 said Ni.

1 9. (Original) A method of manufacturing the electrode material
2 for electrical discharge machining recited in claim 1,
3 using a source powder containing a Cu powder and/or a W
4 powder, and a powder of at least one selected from an
5 alkali metal element, an alkaline-earth metal element and
6 a rare-earth element, and an oxide, a hydroxide, a nitride,
7 a boride and a sulfide of said elements, said source powder
8 being mixed by using one of a mechanical alloying method,
9 a method of using a fine source powder, and a
10 coprecipitation method.

1 10. (Currently amended) An electrode material for electrical
2 discharge machining made of a W-Cu alloy containing at
3 least 40% by weight of W, at most 15% by weight of one of
4 an additional element and a compound thereof, and a balance
5 of [[Eu,]] Cu and from 0 to 10% by weight of Ni,
6 containing, as one of said additional element and said
7 compound thereof, at most 10% by weight of at least one
8 selected from an alkali metal element, an alkaline-earth
9 metal element and a rare-earth element, and an oxide, a
10 hydroxide, a nitride, a boride and a sulfide of said
11 elements in particles having a mean interparticle spacing
12 of at most [[20μm.]] 14μm.

1 11. (Currently amended) The electrode material for electrical
2 discharge machining according to claim 10, wherein said
3 ~~at least one selected from said alkali metal element, said~~
4 ~~alkaline-earth metal element and said rare-earth element,~~
5 ~~and said oxide, said hydroxide, said nitride, said boride~~
6 ~~and said sulfide of said elements in particles [[has]] have~~
7 a mean particle diameter of less than 1μm.

1 12. (Currently amended) The electrode material for electrical
2 discharge machining according to claim 10, wherein said
3 ~~at least one selected from said alkali metal element, said~~
4 ~~alkaline-earth metal element and said rare-earth element,~~
5 ~~and said oxide, said hydroxide, said nitride, said boride~~

6 and said sulfide of said elements in particles has a mean
7 interparticle spacing of said particles is at most 10 μ m.

1 13. (Currently amended) The electrode material for electrical
2 discharge machining according to claim 10, wherein said at
3 least one selected from said alkali metal element, said
4 alkaline-earth metal element and said rare-earth element,
5 and said oxide, said hydroxide, said nitride, said boride
6 and said sulfide of said elements in said particles
7 exists in is mixed into particles of the Cu.

1 14. (Currently amended) The electrode material for electrical
2 discharge machining according to claim 10, wherein said at
3 least one selected from said alkali metal element, said
4 alkaline-earth metal element and said rare-earth element,
5 and said oxide, said hydroxide, said nitride, said boride
6 and said sulfide of said elements in said particles exists
7 in some of W particles. is mixed into some particles of
8 the W.

1 15. (Original) The electrode material for electrical discharge
2 machining according to claim 10, wherein said alkali metal
3 element, said alkaline-earth metal element and said
4 rare-earth element, and said oxide, said hydroxide, said
5 nitride, said boride and said sulfide of said elements are
6 at least one of Ba, Nd, Ce, Y, Ca and K, and an oxide and
7 a hydroxide thereof.

1 16. (Currently amended) The electrode material for electrical
2 discharge machining according to claim 10, wherein said w
3 contains is contained in W particles that include at least
4 30% by weight of particles having a particle diameter of at
5 most 1 μ m with respect to all of the W particles.

1 17. (Currently amended) The electrode material for electrical
2 discharge machining according to claim 10, wherein ~~at most~~
3 ~~10% by weight of Ni is further contained instead of a~~
4 ~~portion of said Cu. containing a positive amount of~~
5 said Ni.

1 18. (Original) A method of manufacturing the electrode material
2 for electrical discharge machining recited in claim 10,
3 using a source powder containing a Cu powder and/or a W
4 powder, and a powder of at least one selected from an
5 alkali metal element, an alkaline-earth metal element and
6 a rare-earth element, and an oxide, a hydroxide, a nitride,
7 a boride and a sulfide of said elements, said source powder
8 being mixed by using one of a mechanical alloying method,
9 a method of using a fine source powder, and a
10 coprecipitation method.

1 19. (Currently amended) An electrode material for electrical
2 discharge machining made of a W-Cu alloy containing at
3 least 40% by weight of W, at most 15% by weight of one of

4 an additional element and a compound thereof, and a balance
5 of [[Eu-]] Cu and from 0 to 10% by weight of Ni,
6 containing, as one of said additional element and said
7 compound thereof, at most 10% by weight of at least one
8 selected from an alkali metal element, an alkaline-earth
9 metal element and a rare-earth element, and an oxide, a
10 hydroxide, a nitride, a boride and a sulfide of said
11 elements in particles having a mean particle diameter of
12 less than 3 μ m and a mean interparticle spacing of at most
13 [[20 μ m-]] 14 μ m.

1 20. (Currently amended) The electrode material for electrical
2 discharge machining according to claim 19, wherein said
3 ~~at least one selected from said alkali metal element, said~~
4 ~~alkaline-earth metal element and said rare-earth element,~~
5 ~~and said oxide, said hydroxide, said nitride, said boride~~
6 ~~and said sulfide of said elements in particles has a mean~~
7 ~~particle diameter of said particles is less than 1 μ m.~~

1 21. (Currently amended) The electrode material for electrical
2 discharge machining according to claim 19, wherein said
3 ~~at least one selected from said alkali metal element, said~~
4 ~~alkaline-earth metal element and said rare-earth element,~~
5 ~~and said oxide, said hydroxide, said nitride, said boride~~
6 ~~and said sulfide of said elements in particles has a mean~~
7 ~~interparticle spacing of said particles is at most 10 μ m.~~

1 22. (Currently amended) The electrode material for electrical
2 discharge machining according to claim 19, wherein said at
3 least one selected from said alkali metal element, said
4 alkaline-earth metal element and said rare-earth element,
5 and said oxide, said hydroxide, said nitride, said boride
6 and said sulfide of said elements in said particles
7 ~~exists in~~ is mixed into particles of the Cu.

1 23. (Currently amended) The electrode material for electrical
2 discharge machining according to claim 19, wherein said at
3 least one selected from said alkali metal element, said
4 alkaline-earth metal element and said rare-earth element,
5 and said oxide, said hydroxide, said nitride, said boride
6 and said sulfide of said elements in said particles ~~exists~~
7 ~~in some of W particles.~~ is mixed into some particles of
8 the W.

1 24. (Original) The electrode material for electrical discharge
2 machining according to claim 19, wherein said alkali metal
3 element, said alkaline-earth metal element and said
4 rare-earth element, and said oxide, said hydroxide, said
5 nitride, said boride and said sulfide of said elements are
6 at least one of Ba, Nd, Ce, Y, Ca and K, and an oxide and
7 a hydroxide thereof.

1 25. (Currently amended) The electrode material for electrical
2 discharge machining according to claim 19, wherein said W

3 ~~contains is contained in W particles that include at least~~
4 ~~30% by weight of particles having a particle diameter of at~~
5 ~~most 1 μ m with respect to all of the W particles.~~

1 26. (Currently amended) The electrode material for electrical
2 discharge machining according to claim 19, ~~wherein at most~~
3 ~~10% by weight of Ni is further contained instead of a~~
4 ~~portion of said Cu. containing a positive amount of~~
5 ~~said Ni.~~

1 27. (Original) A method of manufacturing the electrode material
2 for electrical discharge machining recited in claim 19,
3 using a source powder containing a Cu powder and/or a W
4 powder, and a powder of at least one selected from an
5 alkali metal element, an alkaline-earth metal element and
6 a rare-earth element, and an oxide, a hydroxide, a nitride,
7 a boride and a sulfide of said elements, said source powder
8 being mixed by using one of a mechanical alloying method,
9 a method of using a fine source powder, and a
10 coprecipitation method.

1 28. (Currently amended) An electrode material for electrical
2 discharge machining made of a W-Cu alloy containing at
3 least 40% by weight of W, at most 15% by weight of one of
4 an additional element and a compound thereof, and a balance
5 of ~~[[Cu,]] Cu and from 0 to 10% by weight of Ni,~~
6 containing, as one of said additional element and said

7 compound thereof, at most 10% by weight of at least one
8 selected from an alkali metal element, an alkaline-earth
9 metal element and a rare-earth element, and an oxide, a
10 hydroxide, a nitride, a boride and a sulfide of said
11 elements in particles, wherein a content of said particles
12 having a particle diameter of at most $3\mu\text{m}$ is at least 0.3%
13 by weight with respect to the entire alloy.

1 29. (Currently amended) The electrode material for electrical
2 discharge machining according to claim 28, containing said
3 at least one selected from said alkali metal element, said
4 alkaline-earth metal element and said rare-earth element,
5 and said oxide, said hydroxide, said nitride, said boride
6 and said sulfide of said elements in said particles,
7 wherein [[α]] said content of said particles having [[α]]
8 said particle diameter of at most $3\mu\text{m}$ is at least 0.6% by
9 weight with respect to the entire alloy.

1 30. (Currently amended) The electrode material for electrical
2 discharge machining according to claim 28, containing said
3 at least one selected from said alkali metal element, said
4 alkaline-earth metal element and said rare-earth element,
5 and said oxide, said hydroxide, said nitride, said boride
6 and said sulfide of said elements in said particles,
7 wherein a content of said particles having a particle
8 diameter of at most $1\mu\text{m}$ is at least 0.3% by weight with
9 respect to the entire alloy.

1 31. (Currently amended) The electrode material for electrical
2 discharge machining according to claim 28, wherein said at
3 least one selected from said alkali metal element, said
4 alkaline-earth metal element and said rare-earth element,
5 and said oxide, said hydroxide, said nitride, said boride
6 and said sulfide of said elements in said particles
7 ~~exists in~~ is mixed into particles of the Cu.

1 32. (Currently amended) The electrode material for electrical
2 discharge machining according to claim 28, wherein said at
3 least one selected from said alkali metal element, said
4 alkaline-earth metal element and said rare-earth element,
5 and said oxide, said hydroxide, said nitride, said boride
6 and said sulfide of said elements in said particles ~~exists~~
7 ~~in some of W particles.~~ is mixed into some particles of
8 the W.

1 33. (Original) The electrode material for electrical discharge
2 machining according to claim 28, wherein said alkali metal
3 element, said alkaline-earth metal element and said
4 rare-earth element, and said oxide, said hydroxide, said
5 nitride, said boride and said sulfide of said elements are
6 at least one of Ba, Nd, Ce, Y, Ca and K, and an oxide and
7 a hydroxide thereof.

1 34. (Currently amended) The electrode material for electrical
2 discharge machining according to claim 28, wherein said W
3 ~~contains~~ is contained in W particles that include at least
4 30% by weight of particles having a particle diameter of at
5 most 1 μ m with respect to all of the W particles.

1 35. (Currently amended) The electrode material for electrical
2 discharge machining according to claim 28, ~~wherein at most~~
3 ~~10% by weight of Ni is further contained instead of a~~
4 ~~portion of said Cu~~ containing a positive amount of
5 said Ni.

1 36. (Original) A method of manufacturing the electrode material
2 for electrical discharge machining recited in claim 28,
3 using a source powder containing a Cu powder and/or a W
4 powder, and a powder of at least one selected from an
5 alkali metal element, an alkaline-earth metal element and
6 a rare-earth element, and an oxide, a hydroxide, a nitride,
7 a boride and a sulfide of said elements, said source powder
8 being mixed by using one of a mechanical alloying method,
9 a method of using a fine source powder, and a
10 coprecipitation method.

1 37. (Currently amended) An electrode material for electrical
2 discharge machining made of a W-Cu alloy containing at
3 least 40% by weight of W, at most 15% by weight of one of
4 an additional element and a compound thereof, and a balance

5 of [[Eu,]] Cu and from 0 to 10% by weight of Ni,
6 containing, as one of said additional element and said
7 compound thereof, at most 10% by weight of at least one
8 selected from an alkali metal element, an alkaline-earth
9 metal element and a rare-earth element, and an oxide, a
10 hydroxide, a nitride, a boride and a sulfide of said
11 elements in particles, wherein a content of said particles
12 having an interparticle spacing of at most [[20 μ m]] 14 μ m is
13 at least 0.3% by weight with respect to the entire alloy.

1 38. (Currently amended) The electrode material for electrical
2 discharge machining according to claim 37, containing said
3 at least one selected from said alkali metal element, said
4 alkaline-earth metal element and said rare-earth element,
5 and said oxide, said hydroxide, said nitride, said boride
6 and said sulfide of said elements in said particles,
7 wherein a content of said particles having an interparticle
8 spacing of at most 10 μ m is at least 0.3% by weight with
9 respect to the entire alloy.

1 39. (Currently amended) The electrode material for electrical
2 discharge machining according to claim 37, containing said
3 at least one selected from said alkali metal element, said
4 alkaline-earth metal element and said rare-earth element,
5 and said oxide, said hydroxide, said nitride, said boride
6 and said sulfide of said elements in said particles,
7 wherein a content of said particles having an interparticle

8 spacing of at most 10 μ m is at least 0.7% by weight with
9 respect to the entire alloy.

1 40. (Currently amended) The electrode material for electrical
2 discharge machining according to claim 37, wherein said at
3 least one selected from said alkali metal element, said
4 alkaline-earth metal element and said rare-earth element,
5 and said oxide, said hydroxide, said nitride, said boride
6 and said sulfide of said elements in said particles
7 ~~exists in~~ is mixed into particles of the Cu.

1 41. (Currently amended) The electrode material for electrical
2 discharge machining according to claim 37, wherein said at
3 least one selected from said alkali metal element, said
4 alkaline-earth metal element and said rare-earth element,
5 and said oxide, said hydroxide, said nitride, said boride
6 and said sulfide of said elements in said particles ~~exists~~
7 ~~in some of W particles.~~ is mixed into some particles of
8 the W.

1 42. (Original) The electrode material for electrical discharge
2 machining according to claim 37, wherein said alkali metal
3 element, said alkaline-earth metal element and said
4 rare-earth element, and said oxide, said hydroxide, said
5 nitride, said boride and said sulfide of said elements are
6 at least one of Ba, Nd, Ce, Y, Ca and K, and an oxide and
7 a hydroxide thereof.

1 43. (Currently amended) The electrode material for electrical
2 discharge machining according to claim 37, wherein said W
3 ~~contains~~ is contained in W particles that include at least
4 30% by weight of particles having a particle diameter of at
5 most 1 μ m with respect to all of the W particles.

1 44. (Currently amended) The electrode material for electrical
2 discharge machining according to claim 37, wherein ~~at most~~
3 ~~10% by weight of Ni is further contained instead of a~~
4 ~~portion of said Cu. containing a positive amount of~~
5 said Ni.

1 45. (Original) A method of manufacturing the electrode material
2 for electrical discharge machining recited in claim 37,
3 using a source powder containing a Cu powder and/or a W
4 powder, and a powder of at least one selected from an
5 alkali metal element, an alkaline-earth metal element and
6 a rare-earth element, and an oxide, a hydroxide, a nitride,
7 a boride and a sulfide of said elements, said source powder
8 being mixed by using one of a mechanical alloying method,
9 a method of using a fine source powder, and a
10 coprecipitation method.

1 46. (New) The electrode material for electrical discharge
2 machining according to claim 1, wherein said W-Cu alloy
3 contains 0% by weight of Ni.

1 47. (New) The electrode material for electrical discharge
2 machining according to claim 1, wherein said W-Cu alloy
3 consists of said W, said one of said additional element and
4 said compound thereof, and said Cu.

1 48. (New) The electrode material for electrical discharge
2 machining according to claim 10, wherein said W-Cu alloy
3 contains 0% by weight of Ni.

1 49. (New) The electrode material for electrical discharge
2 machining according to claim 10, wherein said W-Cu alloy
3 consists of said W, said one of said additional element and
4 said compound thereof, and said Cu.

1 50. (New) The electrode material for electrical discharge
2 machining according to claim 19, wherein said W-Cu alloy
3 contains 0% by weight of Ni.

1 51. (New) The electrode material for electrical discharge
2 machining according to claim 19, wherein said W-Cu alloy
3 consists of said W, said one of said additional element and
4 said compound thereof, and said Cu.

1 52. (New) The electrode material for electrical discharge
2 machining according to claim 28, wherein said W-Cu alloy
3 contains 0% by weight of Ni.

1 53. (New) The electrode material for electrical discharge
2 machining according to claim 28, wherein said W-Cu alloy
3 consists of said W, said one of said additional element and
4 said compound thereof, and said Cu.

1 54. (New) The electrode material for electrical discharge
2 machining according to claim 37, wherein said W-Cu alloy
3 contains 0% by weight of Ni.

1 55. (New) The electrode material for electrical discharge
2 machining according to claim 37, wherein said W-Cu alloy
3 consists of said W, said one of said additional element and
4 said compound thereof, and said Cu.

[RESPONSE CONTINUES ON NEXT PAGE]